
General Information

Project Title	Squilchuck Creek Basin Stormwater Retrofit
Project ShortDescription	Chelan County proposes to investigate opportunities to improve water quality within the Squilchuck Creek Basin. Within this 100 acre basin, the stormwater system provides only conveyance, for which untreated stormwater is discharged into Squilchuck Creek. There is not any dedicated water quality treatment for this system. Land uses range from residential, commercial, and industrial activities. The County is seeking pre-construction funding to investigate stormwater retrofit opportunities.
Project LongDescription	<p>Within Chelan County, the Squilchuck stormwater system conveys an approximate 100-acre basin in south Wenatchee, Washington. Two trunklines running to the west along Viewdale Street and Terminal Avenue (the upper basin) intersect a 36-inch (48-inch line at the outfall) that runs to the south on South Wenatchee Avenue approximately 1,200 feet (the lower basin) before outfalling to Squilchuck Creek (see attached vicinity map).</p> <p>As a result of funding from the Department of Ecology through the 2013 - 2015 Municipal Stormwater Capacity Grant Program (FY2014, Grant No. G1400268), Chelan County</p>

General Information

utilized this opportunity to plan and design (pre-construction) the Squilchuck Outfall project. The Ecology approved 90% Plans, Specifications, and Estimate detailed a combination hydrodynamic separator/subsurface infiltration facility for stormwater that currently enters the creek untreated. The proposed system detains and infiltrates the 6-month, short-duration storm. Larger events will still be directed through the pretreatment/infiltration system, but will be allowed to overflow to the creek. Additionally, flows in excess of the hydrodynamic separator's rated capacity will bypass the pretreatment/infiltration system.

The pre-construction Design Report recommended that additional water quality treatment opportunities be investigated within this basin to provide increased water quality benefit and treatment to stormwater pollution runoff from existing development. As such, Chelan County Public Works is requesting funding from the Department of Ecology to investigate additional opportunities to improve stormwater water quality within the Squilchuck Basin.

The county will utilize Department of

General Information

	Ecology's 2004 Stormwater Management Manual for Eastern Washington, WSDOT's Highway Runoff Manual, and the Eastern Washington Low Impact Development Guidance Manual.	
Total Cost	\$200,000.00*	Total Eligible Cost \$200,000.00*
Effective Date	7/1/2015	Expiration Date 3/31/2017
Project Category*	<input checked="" type="checkbox"/> Stormwater Green Retrofit Pre-Construction Planning and Design1	
Will Environmental Monitoring Data be collected?	No	
Ecology Program	Water Quality	
Overall Goal	If funded, Chelan County will investigate additional opportunities to increase water quality treatment within this developed basin. If this occurs, water quality will be improved within Squilchuck Creek, in which steelhead trout and Chinook salmon occupy and are listed as federal endangered species.	

Recipient Contacts

Project Manager

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Authorized Signatory

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Recipient Contacts

Other recipient signatures on printed agreement

Name

Board of County Commissioners

Title

Chairman

WATER QUALITY STORMWATER PRE-CONSTRUCTION GRANTS

Organization: Chelan County - Public Works Department

WQSWPC-2016-ChCoPW-00051

Location Information

Statewide Yes No

Ecology Region Central 100%

County CHELAN 100%

Congressional District District 08 100%

Legislative District District 12 100%

WRIA 45 - Wenatchee 100%

Latitude (expressed in decimals) 47.396

Longitude (expressed in decimals) -120.301

Facility Site ID

Facility Site Link

WATER QUALITY STORMWATER PRE-CONSTRUCTION GRANTS

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WQSWPC-2016-ChCoPW-00051

Scope of Work - Task 1 Project Admin: 1

Task Number	1		
Task Title	Project Administration/Management	Task Cost	\$20,000.00
Task Description	<p>A. The RECIPIENT will administer the project. Responsibilities will include, but not be limited to: maintenance of project records; submittal of requests for reimbursement and corresponding backup documentation, progress reports and recipient closeout report (including photos); compliance with applicable procurement, contracting, and interlocal agreement requirements; application for, receipt of, and compliance with all required permits, licenses, easements, or property rights necessary for the project; and submittal of required performance items.</p> <p>B. The RECIPIENT must manage the project. Efforts will include: conducting, coordinating, and scheduling project activities and assuring quality control. Every effort will be made to maintain effective communication with the RECIPIENT's designees; ECOLOGY; all affected local, state, or federal jurisdictions; and any interested individuals or groups. The RECIPIENT must carry out this project in accordance with any completion dates outlined in this agreement.</p>		
Task Goal Statement	Properly managed project that meets agreement and Ecology administrative requirements.		
Task Expected Outcomes	<ul style="list-style-type: none"> * Timely and complete submittal of requests for reimbursement, quarterly progress reports and recipient closeout report. * Properly maintained project documentation 		
Recipient Task Coordinator	Jason Detamore		

Deliverable #	Description	Due Date	Received?	EIM Study ID	EIM System Link	Latitude	Longitude	Location Address
1.1	Progress Reports		(ECY Use Only)					
1.2	Recipient Closeout Report							
1.3	Project Outcome Summary Report							

WATER QUALITY STORMWATER PRE-CONSTRUCTION GRANTS

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Scope of Work - Additional Tasks: 2 - Pre-Construction Planning and Design

Task Number	2		
Task Title	Pre-Construction Planning and Design	Task Cost	\$180,000.00*
Task Description	<p>A) Pre-Design Report: The county will submit two hard copies and one digital copy of the pre-design report to Ecology's project manager for review and acceptance. Ecology will work with the county to review for consistency with the appropriate design criteria and grant requirements. Detailed calculations and/or drawings are required to be provided with the report.</p> <p>B) 90 Percent Design Plans: The county will submit two hard copies and one digital copy of the 90 percent design plans to Ecology's project manager for review and acceptance. Ecology will work with the county's project engineer to review the plans and specifications for consistency with the appropriate design criteria and grant requirements. Ecology then will provide comments to the county.</p>		
Task Goal Statement	This task will improve water quality in the State of Washington, specifically within Squilchuck Creek, by reducing the pollutants delivered by stormwater. This effort is in response to the county's Phase II Municipal Stormwater Permit.		
Task Expected Outcomes	To have a 90 percent design package that includes plans, specifications, and an estimate in preparation for future construction funding.		
Recipient Task Coordinator	Jason Detamore		

Deliverables

To Add a Row

Enter a deliverable
 When done, click the SAVE button
 After SAVE a new row will appear
 Repeat these steps for each deliverable

To Delete a Row

Delete data entered in a row
 When done, click the SAVE button

Deliverable #	Description	Due Date	Received? (ECY Use Only)	EIM Study ID	EIM System Link	Latitude	Longitude	Location Address
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Scope of Work - Additional Tasks: 2 - Pre-Construction Planning and Design

- 2.1 Pre-Design Report
 - 2.2 90 Percent Design Plans
- Submit 90 percent plans to the Department of Ecology for review and acceptance

WATER QUALITY STORMWATER PRE-CONSTRUCTION GRANTS

Organization: Chelan County - Public Works Department

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Scope of Work Summary

Task Title	Task Cost
Project Administration/Management	\$20,000.00
Pre-Construction Planning and Design	\$180,000.00
Total	\$200,000.00

Total Eligible Costs
(from the General Information Form)
\$200,000.00

WATER QUALITY STORMWATER PRE-CONSTRUCTION GRANTS

Organization: Chelan County - Public Works Department

WQSWPC-2016-ChCoPW-00051

Additional Funding Information

Grant Amount Requested \$200,000\$200,000.00

Requested

Do you have any other funds committed to this project? * Yes No N/A

Do you have any other funds committed to this project? *

Include secured matching funds in the "Secured Funds" table. If you have any questions about what's required for match, please see the current guidelines available for download on the Application Menu.

If yes, provide the following information: *

Secured Funds

Source	Type	Amount Committed
State/Federal agency:		
State/Federal agency:		
State/Federal agency:		
Interlocal contributions:		
Interlocal contributions:		
Local agency:		
In-kind contributions:		
Other:		

WATER QUALITY STORMWATER PRE-CONSTRUCTION GRANTS

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Water Body and Water Quality Needs Addressed

Check all type(s) of water bodies that this project targets: *

- Freshwater rivers
- Freshwater lakes
- Freshwater wetlands
- Ground water
- Direct marine water
- Saltwater estuary
- Other (specify)

Check all the resource protection and regulatory requirements that this project addresses: *

- Endangered or threatened salmonids
- Other Endangered Species Act protected species (specify)
- Protection of shellfish habitat [Click Here](#)
- National Pollutant Discharge Elimination System (NPDES) permit requirements
- State Waste Discharge Permit
- Other (specify)
- N/A

Check all the water quality parameters that this project targets: *

- Dissolved oxygen
- Sediment
- Nitrogen
- Fecal coliform
- Phosphorus
- Temperature
- pH
- Metals
- Toxics
- Other (specify)

Identify the water bodies, any impairments (Category 4A, 4B, and 5 waters), and listing parameters that your project will address.

Enter a Water Body Name and Listing Detail ID
 When done, click the SAVE button
 After SAVE a new row will appear
 Repeat these steps for each Listing Detail ID

To Delete a Row, In the row you want to delete,
 remove the information in the Water Body Name and
 Listing Detail
 When done, click the SAVE button.
 After SAVE the row will be deleted

Water Body Name	Listing Detail ID	Map Link
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Are you addressing a TMDL? * Yes

- No
- If Yes, List the TMDL(s) your project is addressing

To select multiple TMDLs, hold down the control key as you select

WATER QUALITY STORMWATER PRE-CONSTRUCTION GRANTS

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Water Body and Water Quality Needs Addressed

To deselect a TMDL, hold down the control key as you select

TMDL Name

Please identify all 12 digit HUCs in which the project work will be done.*

To add a HUC code

To delete a HUC code

Enter the HUC code and Percentage and Save

Remove the HUC code and percentage and Save

A blank row will appear

The row will be removed

Repeat for each HUC code

HUC Code *

Percentage *

170200110309

100%

100

Project Description

*

Name the water body or bodies that will be improved by the implementation of the proposed project.

To add a water body

To remove a water body

Enter a water body's name

Remove the water body's name and Save

Click Save, a blank row will appear

The row will be removed

Repeat for each water body

Squilchuck Creek

*

Describe the project area. Include the land use and describe how the drainage area connects to the water body named above.

The total size of the Squilchuck Creek Basin is approximately 100 acres. Much of the basin within the City of Wenatchee is zoned as high-density residential with lots of approximately 0.15 acres in size. This zoning and lot size is similar into the County except on the steeper slopes. Additionally, agricultural uses are also found higher in the basin with more commercial and industrial lots located lower in the basin.

The existing topography slopes generally to the east at around 3 percent with some steeper slopes up to 10 percent. There is approximately 200 feet of elevation difference between the top of the basin and the outfall into Squilchuck Creek.

Existing stormwater controls in the basin consist only of the conveyance system. Two trunklines running to the west along Viewdale Street and Terminal Avenue (the upper basin) intersects a 36-inch line (48-inch line at the outfall) that runs to

Project Description

he south on South Wenatchee Avenue approximately 1,200 feet (the lower basin) before outfalling to Squilchuck Creek. A smaller approximate 500 linear foot stormwater system along Boodry Street also discharges to Squilchuck Creek.

This project proposes to investigate additional opportunities for pre-treatment, detention, and infiltration of a portion of the stormwater in order to improve the quality of the water that ultimately flows into Squilchuck Creek.

Upload a map or maps that show an aerial view of the project area, an estimated direction of flow for the project area, potential locations for BMPs, and how the project connects to the water body named above.

These maps do not need to be precise but they should help the reviewer with a general understanding of the area. If access to GIS software is not available, screen shots or snips from Google Maps with arrows and text added using a paint program may be used.

To add a map

To delete a map

Enter a description for the file

Remove the file's description, select the Delete checkbox next to the file and click Save

Click the browse button and select your file

Click Save, your file will appear in the list of uploaded documents

Project Description

Repeat for each file.

Description*

Vicinity Map 1

Vicinity Map 2

Map Attachment*

_Upload/21646-VicinityMap1.pdf

_Upload/21646_2-VicinityMap2.pdf

List and discuss the BMPs that are under consideration.

This discussion should address:

1) The relationship between the pollutants of concern for the water body, the land use of the area you are treating, and the BMP.

2) The appropriateness of the BMP for the site conditions (space available, soils, safety, etc.).

3) Relative (high, medium, low) long term cost to maintain the BMP.

This pre-construction project proposes to investigate additional opportunities for stormwater pre-treatment, detention, and infiltration within the Squilchuck Creek Basin. By retrofitting the existing stormwater conveyance-only system to provide, at a minimum, basic water quality treatment, sediment and other pollutants will be removed from Squilchuck Creek. This effort will determine appropriate locations for these stormwater BMPs based upon available land, soils, infiltration

Project Description

rate, O&M costs, safety, and other such criteria.

Based on the current knowledge of the project area, discuss specific challenges that may be encountered while designing and implementing the proposed project.

The goal of requesting pre-construction funding from Ecology is to investigate the Squilchuck Creek Basin and determine appropriate locations for stormwater system retrofits in order to improve water quality. This investigation will be required to detail challenges (or the lack thereof) the county may be faced with by implementing certain projects.

When will this project be constructed and what is the plan for financing the construction?

Chelan County would like to apply for Department of Ecology construction funding of this project during the FY2018 - Water Quality Financial Assistance grant cycle. Match requirements will be provided by Chelan County's Surface and Stormwater Management Utility.

Upload the schedule for the planning project. Include key milestones and assume Ecology will require a 45 day review period for the design report and 90% design package.

To add a schedule

To delete a schedule

Enter a description for the file

Remove the file's description, select the Delete checkbox next to the file and click Save

Click the browse button and select your file

Project Description

Click Save, your file will appear
in the list of uploaded documents

Repeat for each file.

Description*

See attached schedule

Schedule Attachment*

_Upload/21646-PreConstruction
Schedule.pdf

**Describe any tasks that have
been completed or will be
completed prior to July 1,
2015.**

Chelan County was provided funding from Ecology for the FY2014, 2013 - 2015 Municipal Stormwater Capacity Grant (G1400268). This project focused on investigating opportunities at the stormwater outfall located at Squilchuck Creek. Ecology approved the 90% plans, specifications, and estimate for this portion of the work. The current request is to increase the water quality in this basin by investigating additional opportunities in this basin.

*